

Integrating AI into Strategic Human Resource Management for Sustainability in the Thai Context

การบูรณาการปัญญาประดิษฐ์เข้ากับการบริหารทรัพยากรมนุษย์เชิงกลยุทธ์เพื่อความยั่งยืนในบริบทของประเทศไทย

Author

Aunchistha Poo-Udom D.B.A., MPPM., B.Econ (aunchistha.p@ku.th)

Lecturer of the Service Innovation and Intercultural Communication program,
Department of Hospitality Innovation and Intercultural Communication,
Faculty of Hospitality Industry, Kasetsart University, Thailand

ORCID ID: 0000-0003-3319-1555  (Corresponding Author)

Acknowledgements

This research was completed with research grant support from the *Faculty of Hospitality Industry, Kasetsart University, Fiscal Year 2026*. Sincere appreciation is extended to the qualified experts for their valuable guidance in validating the research instruments. Special thanks are also due to the executives and human resource personnel of the participating organizations for generously dedicating their time and insights during the data collection process.

Revised: January 18, 2026; Revised: June 7, 2026; Accepted: June 27, 2026

Abstract

This research aims to: 1) explore the status of Artificial Intelligence (AI) applications in Human Resource Management (HRM) within large Thai enterprises, 2) develop a framework that integrates AI into Strategic HRM for social sustainability, and 3) propose practical guidelines tailored to the Thai cultural context. Adopting a mixed-methods Exploratory Sequential design, the study was conducted in two phases. Phase 1 involved qualitative in-depth interviews with 35 executives and experts, which were analyzed using thematic analysis. Phase 2 employed quantitative research through an online survey of 377 employees in large organizations, with data analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal an "Efficiency Trap" in Thai organizations, where AI adoption prioritizes cost reduction and speed over long-term value creation. Quantitative analysis indicates that the structural model accounts for 61.2% of the variance in sustainable performance ($R^2 = 0.612$), driven primarily by Digital-Green Synergy. While the cultural norm of "*Kreng Jai*" negatively impacts employee voice, the study establishes that "Psychological Safety" and "Human-Centric HRM" serve as effective moderators that mitigate these adverse effects. Consequently, this research proposes the "3T Framework" (Trust, Transparency, and Touch) as a strategic guide for Thai organizations to overcome cultural barriers and successfully transition into ethical, sustainable, and data-driven entities.

Keywords: Artificial Intelligence, Strategic Human Resource Management, Social Sustainability, Twin Transition, Thai Context

บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อ 1) ศึกษาสถานะการใช้ AI ในการบริหารทรัพยากรมนุษย์ (HRM) ขององค์กรไทย 2) พัฒนากกรอบแนวคิดเชิงกลยุทธ์เพื่อความยั่งยืน และ 3) เสนอแนวทางปฏิบัติที่เหมาะสมกับบริบทไทย โดยใช้ระเบียบวิธีวิจัยแบบผสมผสาน (Mixed-Methods) แบ่งเป็น 2 ระยะ คือ การสัมภาษณ์เชิงลึกผู้บริหาร 35 ท่าน และการสำรวจพนักงาน 377 คน วิเคราะห์ด้วยโมเดลสมการโครงสร้าง (PLS-SEM) ผลการวิจัยพบปรากฏการณ์ "กับดักประสิทธิภาพ" (Efficiency Trap) ที่องค์กรไทยเน้นใช้ AI เพื่อลดต้นทุนมากกว่าสร้างคุณค่าระยะยาว ผลวิเคราะห์ชี้ว่า แบบจำลองโครงสร้างสามารถอธิบายความแปรปรวนของความยั่งยืนได้ร้อยละ 61.2 ($R^2 = 0.612$) โดยมีปัจจัยหนุนหลักจากการเปลี่ยนผ่านสู่ขนาดดิจิทัลและสีเขียว ในขณะที่ค่านิยม "ความเกรงใจ" เป็นอุปสรรคต่อการแสดงความคิดเห็นของพนักงาน แต่สามารถลดทอนผลกระทบได้ด้วย "ความปลอดภัยทางจิตวิทยา" และ "HRM ที่เน้นคนเป็นศูนย์กลาง" งานวิจัยจึงนำเสนอ "กรอบแนวคิด 3T" (Trust, Transparency, Touch) เป็นกลยุทธ์ช่วยให้องค์กรไทยก้าวข้ามอุปสรรคทางวัฒนธรรมสู่การเป็นองค์กรที่ยั่งยืนและขับเคลื่อนด้วยข้อมูล

คำสำคัญ: ปัญญาประดิษฐ์, การบริหารทรัพยากรมนุษย์เชิงกลยุทธ์, ความยั่งยืนทางสังคม, การเปลี่ยนผ่านสู่ขนาด, บริบทไทย

1. Introduction

In the 21st century, the business world is facing a massive wave of change battering economic and social structures like never before. This phenomenon is not merely a cyclical change but a Structural Transformation that global scholars call "The Twin Transition," born from the convergence of two powerful forces of change: Digital Transformation and Sustainability. The synergy of these two streams has created tremors that destroy old orders while simultaneously creating new opportunities. In particular, Artificial Intelligence (AI) technology has evolved from an enabler to an "Actor" that plays a vital role in thinking, analysis, and decision-making within business processes, directly affecting how "people," or human resources, in organizations are managed ([Budhwar et al., 2023](#)).

In Thailand, Human Resource Management (HRM) stands at a critical crossroads. Under the Thailand 4.0 national strategy and the BCG (Bio-Circular-Green Economy) model, Thai business organizations are under pressure to accelerate adaptation to enhance competitiveness. However, preliminary surveys suggest that the adoption of AI in HRM within most Thai organizations remains stuck in "The Efficiency Trap."

Specifically, executives often view AI merely as a tool for "Headcount Reduction" or workload reduction to save costs in the short term, rather than viewing it as a strategic tool for Sustainable Value Creation in the long term. This Techno-centric Myopia leads to the neglect of the human dimension. It has negative impacts on employees, such as paranoia about being replaced, stress from monitoring, and the erosion of workplace relationships ([Bankins, 2021](#); [Pimthong, 2021](#)).

Furthermore, adopting AI in the Thai social context faces unique cultural challenges, particularly the culture of "Kreng Jai" (being considerate/deferential) and the "Seniority System," which are deeply rooted in Thai social structures ([Tanantong & Wongras, 2024](#)).

These cultures often run counter to the logic of algorithms that require straightforwardness and data accuracy. For example, employees may be hesitant to express opinions that contradict AI results or to provide negative feedback to superiors due to Kreng Jai. This results in "The Ethical Vacuum" and distorted data, ultimately leading to erroneous decisions and the failure to build a truly data-driven organization ([Ruenklin, 2025](#)).

Given these problems and gaps, this research aims to develop guidelines for integrating AI into strategic human resource management to address efficiency traps and cultural limitations. It targets the creation of "Social Sustainability," encompassing employee well-being, equality, and justice within the organization, which will serve as a crucial foundation for Thailand's economic and social development in the digital age ([Thanyawatpornkul, 2024](#)).

Although international studies emphasize the potential of AI in restructuring HR functions, there is a critical research gap regarding how indigenous cultural barriers, such as "Kreng Jai" and seniority systems, interact with algorithmic decision-making. Most existing frameworks assume an environment of open communication and fail to address the distortion of algorithmic feedback caused

by cultural self-censorship. This research addresses this gap by empirically investigating the mediating mechanisms that foster social sustainability within an Asian cultural framework.

2. Research Questions

To ensure the research penetrates the core of the problem and leads to the discovery of new knowledge, this research has defined the main research question and sub-questions as follows:

1) Main Question: How can the integration of Artificial Intelligence (AI) into strategic human resource management drive and elevate social sustainability in large organizations in Thailand under appropriate conditions and ethical frameworks.

2) Sub-question 1: Currently, at what level do large organizations in Thailand apply AI technology in human resource management processes, and what are the patterns or specific characteristics of its use.

3) Sub-question 2: What are the significant obstacles, challenges, and risks, especially in ethical dimensions and impacts on employees, that Thai organizations face when attempting to use AI to promote sustainability.

4) Sub-question 3: What factors positively and negatively influence sustainable performance, and what framework is suitable for the Thai context.

3. Research Objectives

1. To explore the intensity and patterns of AI adoption in various HR functions (e.g., recruitment, development, retention) in large Thai business organizations.

2. To analyze and prioritize challenges—technical, human, and ethical—that hinder the creation of social sustainability.

3. To develop a prototype framework for integrating AI into HR strategy with sustainability goals at the center.

4. To propose practical guidelines and policies for organizational executives in preparation and change management consistent with the Thai context.

4. Scope of the Research

This research defines the scope to obtain precise and reliable results as follows:

Content Scope: This study primarily focuses on Narrow AI applications currently operational in Thai HR functions (e.g., Machine Learning for screening, NLP for basic inquiries, and Predictive Analytics). While Generative AI is an emerging trend, Narrow AI represents the immediate reality of adoption in most large Thai enterprises.

Population Scope: Specifically studies Large Enterprises in Thailand that are well-resourced and well-infrastructured for AI adoption. The sample group comprises senior executives, HR experts, and employees from these organizations.

Area and Time Scope: Conducted in Thailand, with data collection during the fiscal year 2026, targeting a validated final sample of 377 respondents for the quantitative phase.

5. Literature Review

The literature review in this chapter aims to synthesize knowledge, theories, and related research to develop a robust conceptual framework that addresses three key issues: Dynamics of Sustainability and AI, Related Management Theories, and the Cultural Context of Thailand.

Organizational Sustainability in the AI Era: The New Dynamic of Capitalism

Historically, business operations focused on "Shareholder Primacy," but the business world has since transitioned to "Stakeholder Capitalism," which emphasizes creating value for all stakeholders, including employees and society.

Social Sustainability: One of the pillars of ESG (Environmental, Social, Governance) that is often neglected, yet is paramount in the digital age. Research indicates that social sustainability in organizations refers to the ability to promote personnel well-being, diversity, and equity ([Gunasekara et al., 2025](#)).

The Twin Transition: This concept describes the complementary relationship between digital technology and sustainability (Digital-Green Synergy). AI adoption does not aim solely for economic efficiency; it must also be used as an enabler to reduce environmental impacts and elevate human quality of life.

Artificial Intelligence and Strategic Human Resource Management

AI has transformed the role of HR from an Administrative Role to a full "Strategic Partner" ([Bouhsaien & Azmani, 2024](#)).

Application of AI in HRM: Currently, AI is used throughout the employee lifecycle, from Recruitment, using automated screening systems to reduce bias ([Delecraz et al., 2022](#)), to Development, using personalized learning recommendation systems, to Retention, using churn prediction models ([Chaturajinda, 2021](#)).

Risks and Concerns: Although AI has immense benefits, it also poses risks related to "Algorithmic Bias" and privacy violations, which may reduce employee trust (Trust Deficit) ([Newman et al., 2020](#); [Glikson & Woolley, 2020](#); [Cheng & Hackett, 2021](#)).

When synthesizing global AI-HRM research, two distinct paradigms emerge: the technocentric efficiency model, which treats human capital as an optimization variable (Newman et al., 2020), and the human-centric sustainability model, which focuses on employee well-being and justice ([Bankins, 2021](#)). This study synthesizes these viewpoints into the Twin Transition framework, arguing that digital capability must be tethered to social sustainability indicators to create long-term organizational value.

Grounded Theory and Research Conceptual Framework

This research integrates key theories to explain phenomena in the Thai context:

1. TOE Framework (Technology-Organization-Environment Framework): Used as a base to analyze factors affecting AI acceptance and use by considering three dimensions: Technological factors

(AI readiness), Organizational factors (culture, strategy), and Environmental factors (PDPA laws, social pressure).

2. Stakeholder Theory: Used to emphasize that using AI must consider impacts on employees as primary stakeholders, not just for shareholder benefit (Figuerola-Armijos et al., 2023).

3. Thai Context: The research places special importance on cultural variables, namely "Kreng Jai" and "Seniority System," which are specific factors that may hinder AI mechanisms and reduce Data Integrity (Tanantong & Wongras, 2024).

4. Conceptual Framework: From synthesizing literature, the researcher developed a conceptual framework linking AI Application (Independent Variable) to Social Sustainability (Dependent Variable), with Ethical Dimensions and Psychological Safety (Moderating/Mediating Variables) playing a key role in mitigating negative impacts from Thai Culture (Context) to achieve sustainable outcomes (Bankins, 2021).

6. Methodology

This research is grounded in the philosophy of Pragmatism and uses Mixed-Methods Research in an Exploratory Sequential Design, which is well-suited to studying complex phenomena that require in-depth understanding within specific contexts. The research process is divided into 2 phases as follows:

Phase 1: Qualitative Research

The objective is to explore reality, delve into hidden problems, and develop an understanding of the Thai cultural context that affects AI use.

Key Informants: Using Purposive Sampling to select C-Level executives, HR Directors/Managers, and Technology/AI experts in leading Thai organizations, totaling 35 individuals.

Research Instruments: Semi-structured Interview Guide covering issues of AI strategy, cultural obstacles, and perspectives on sustainability.

Data Analysis: Using Thematic Analysis to extract Key Themes and relationship patterns from interview data, leading to the creation of assumptions for Phase 2 (Braun & Clarke, 2006).

Data Analysis & Trustworthiness: Thematic analysis followed Braun & Clarke's (2006) six-phase framework, including initial code generation, theme search, and review of final thematic maps. To ensure trustworthiness and validity, data triangulation (comparing executive interviews with operational manager insights) and member checking with five primary informants were systematically conducted.

Phase 2: Quantitative Research

The objective is to test hypotheses, verify structural relationships, and measure the magnitude of influence of various variables on a broad scale.

Population and Sample: The population is personnel in HR functions and employees in large business organizations in Thailand. The final validated sample size is 377 respondents

Research Instruments: Online Survey developed by the researcher from the literature review and qualitative results in Phase 1, validated for validity and reliability according to academic standards.

Data Analysis: Using advanced statistics to analyze Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS software to test relationships between Latent Variables, Path Coefficients, and Coefficients of Determination (R^2).

7. Results

The research results are presented by integrating findings from both qualitative and quantitative research to provide a clear and profound overview.

1. Qualitative Results: The Efficiency Trap and Cultural Walls

Through thematic analysis of in-depth interviews with 35 key informants (C-level executives, HR experts, and operational managers), the study uncovers complex dynamics that statistics alone cannot capture. The findings highlight a disconnect between the strategic ideal of AI and practical implementation, driven by economic pressures and cultural nuances.

1.1 The Efficiency Trap: Quantity over Quality

While the global discourse on AI focuses on "Augmentation," the reality in many large Thai enterprises is still rooted in "Automation" for cost reduction. The analysis reveals that the "Efficiency Trap" occurs when organizations prioritize speed and financial metrics over the quality of human relationships and long-term sustainability. Furthermore, qualitative data indicate that 'Green' initiatives (such as paperless workflows and remote work to reduce carbon footprints) were more readily adopted than 'Social' initiatives. Participants noted that environmental goals aligned seamlessly with the cost-reduction mandate of the 'Efficiency Trap.' In contrast, social sustainability, requiring investment in employee well-being, was often viewed as a cost burden.

Most executives admitted that their initial mandate for AI adoption was driven by the need to streamline operations and reduce headcount in administrative roles. This "Techno-centric" approach often leads to a mechanical HRM process where the "Human" element is stripped away.

"To be honest, when the board approved the budget for the new AI-Recruitment system, the main KPI was not about finding 'better' people or improving diversity. It was about how many recruiters we could cut and how much faster we could fill the vacancy. We screen thousands of CVs in minutes, but we lost the ability to see the hidden potential that is not written in keywords." —

(Informant 04, HR Director, Logistics Sector)

Furthermore, employees expressed that this focus on efficiency creates a sense of alienation. While efficient, the use of Chatbots and automated ticketing systems for HR services has created a barrier between the workforce and the HR department.

"Everything is via the app now. If I have a problem with my benefits, I talk to a bot. It is fast, yes, but it feels cold. I feel like just a number in a database, not a valued member of the family. The 'Heart' of HR is missing." — **(Informant 18, Senior Marketing Manager, Retail Sector)**

1.2 The "Kreng Jai" Barrier: The Silent Data Distorter

A unique finding crucial to the Thai context is the influence of "Kreng Jai" (Being Considerate/Deferential). The study found that this cultural norm acts as an invisible wall that hinders the effectiveness of AI systems. In a Western context, algorithm aversion might manifest as vocal skepticism; in Thailand, it manifests as "Silence."

The "Kreng Jai" culture, coupled with the Seniority System, creates an environment in which employees are hesitant to challenge AI outputs, especially when those systems are endorsed by senior management. This leads to a phenomenon known as "Lack of Employee Voice," in which errors or biases in AI suggestions go unreported.

"There was a time when the AI talent analytics predicted that a competent junior staff member had a 'Low Potential' score. I knew the data was incomplete, but the CEO championed the system. I did not want to be seen as aggressive or questioning the boss's vision, so I kept quiet and let the promotion cycle pass. It was 'Kreng Jai' that stopped me from speaking the truth." — **(Informant**

29, Department Manager, Financial Sector)

This cultural barrier poses a significant risk to "Data Integrity." When humans do not provide feedback to correct the algorithm (Human-in-the-loop), the AI continues to learn from flawed patterns. Consequently, this leads to erroneous decisions based on incomplete or biased data, undermining the very sustainability the organization aims to achieve (Mahamad & Suttikarn, 2020).

"We talk about being Data-Driven, but in our culture, we are often 'Boss-Driven.' If the AI agrees with the boss, it is correct. If it does not, or if it makes a mistake that the boss ignores, no one dares to point it out. We end up with an advanced tool that validates our old biases." — **(Informant**

11, AI Specialist, Technology Consultant)

Necessity of "Human-Centric": Experts agree that to overcome the above problems, organizations must shift their focus from using AI to "Replace" to using it to "Augment" humans, building a Human-Centric HRM system. (Mahamad & Suttikarn, 2020).

2. Quantitative Results: Sustainability Drivers

The results of the Structural Equation Model (PLS-SEM) analysis (Hair et al., 2024) from a validated sample of 377 people confirm qualitative findings and reveal in-depth relationships. The demographic profile of the sample is shown in **Table 1**.

Table 1: Demographic Profile

Demographic	Number (n=377)	Percentage (%)
Gender		
Male	124	32.90
Female	245	65.00
Alternative	8	2.10
Age		
21 - 30 Years (Gen Z / Young Gen Y)	85	22.55

Demographic	Number (n=377)	Percentage (%)
31 - 40 Years (Gen Y)	165	43.77
41 - 50 Years (Gen X)	98	26.00
51 Years and above (Baby Boomer)	29	7.69
Education		
Bachelor's Degree	215	57.03
Master's Degree	152	40.32
Doctoral Degree	10	2.65
Job Position		
Operational Staff	110	29.18
Supervisor/Department Manager	185	49.07
Senior Executive	82	21.75

Note on Demographics: The gender distribution (64.99% female) reflects the demographic reality of the HR profession in Thailand. This representation is significant as it highlights perspectives from a demographic that often demonstrates higher sensitivity to 'Social Sustainability' and the nuances of the 'Kreng Jai' culture. Furthermore, the inclusion of alternative gender options (2.12%) underscores the organizational push toward diversity, equity, and inclusion (DEI), showing that a psychologically safe workplace is fundamental to capturing the true voices of marginalized groups in tech-driven environments.

Digital-Green Synergy is Key: The analysis found that the variable "Digital-Green Synergy" has the most substantial positive influence on "Sustainable Performance," with a coefficient of determination (R^2) of 0.612. This means this variable can explain 61.2% of the variance in sustainability outcomes. This data indicates that integrating environmental goals with digital strategy is a crucial path to survival.

2.1 Measurement Model Assessment

The assessment of reliability and validity of research instruments considers Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) as shown in **Tables 2 and 3**.

Table 2: Construct Reliability and Validity

Constructs	Cronbach's Alpha	ρ_A	Composite Reliability (CR)	Average Variance Extracted (AVE)	Result
AI Adoption	0.885	0.892	0.915	0.684	Pass
Kreng Jai Culture	0.842	0.850	0.891	0.623	Pass
Psychological Safety	0.905	0.910	0.928	0.721	Pass
Organizational Trust	0.865	0.871	0.903	0.652	Pass
Sustainable Performance	0.912	0.918	0.935	0.745	Pass

Note: Acceptance criteria Cronbach's Alpha > 0.7, CR > 0.7, AVE > 0.5

Table 3: Discriminant Validity - Fornell-Larcker Criterion

Latent Variable	AI Adoption	Kreng Jai	Psych Safety	Trust	Sust Perf
AI Adoption	0.827				
Kreng Jai	-0.325	0.789			
Psych Safety	0.452	-0.585	0.849		
Trust	0.510	-0.420	0.615	0.807	
Sust Perf	0.580	-0.380	0.685	0.620	0.863

Note: Diagonal numbers (bold) are the square root of AVE, which must be greater than the Correlations in the horizontal and vertical axes.

Furthermore, to ensure robust discriminant validity, the Heterotrait-Monotrait Ratio (HTMT) was examined. As suggested by [Henseler et al. \(2015\)](#), the HTMT is more sensitive than the Fornell-Larcker criterion. The results in **Table 4** show that all HTMT values are below the conservative threshold of 0.85 (or the liberal threshold of 0.90), indicating that the constructs' distinctiveness is well established. The structural equation model demonstrates strong explanatory power, with the hypothesized predictors collectively accounting for 61.2% of the total variance in Sustainable Performance ($R^2 = 0.612$, $R^2_{\text{adjust}} = 0.609$). This confirms that balancing technological interventions with human-centric variables explains a substantial portion of sustainable outcomes.

Table 4: Discriminant Validity - Heterotrait-Monotrait Ratio (HTMT)

Latent Variable	AI Adoption	Kreng Jai	Psych Safety	Trust	Sust Perf
AI Adoption					
Kreng Jai	0.352				
Psych Safety	0.498	0.645			
Trust	0.565	0.482	0.688		
Sust Perf	0.624	0.415	0.742	0.695	

Note: All HTMT values are < 0.85, confirming discriminant validity.

2.2 Descriptive Statistics

The analysis results of opinion levels on various variables are shown in **Table 5**.

Table 5: Mean and Standard Deviation of HR Sustainability Variables (n=377)

Variable	Mean ($\bar{x}$)	S.D.	Level
Economic Sustainability	4.25	0.65	High
1. AI significantly reduces HR operational costs	4.35	0.55	High
2. The recruitment and selection process is faster (Time-to-Hire)	4.45	0.50	High
3. Overall employee productivity increased from using AI	3.95	0.75	High
Social Sustainability	2.85	1.05	Moderate

Variable	Mean ($\bar{x}$)	S.D.	Level
4. Employees have better Work-Life Balance	2.65	1.15	Moderate
5. Employees have less work stress (Reduced Stress)	2.75	1.10	Moderate
6. The organization has more Diversity and Inclusion (DEI)	3.15	0.95	Moderate
Environmental Sustainability	3.95	0.78	High
7. Using AI reduces paper usage (Paperless) in HR tasks	4.55	0.45	Highest
8. AI systems support remote work, reducing travel and Carbon Footprint	4.25	0.65	High

2.3 Structural Model Assessment

Negative Impact of Culture: Hypothesis testing confirms that the "Kreng Jai" culture has a significant adverse effect on "Employee Voice," thereby hindering innovation and transparency checks in AI systems.

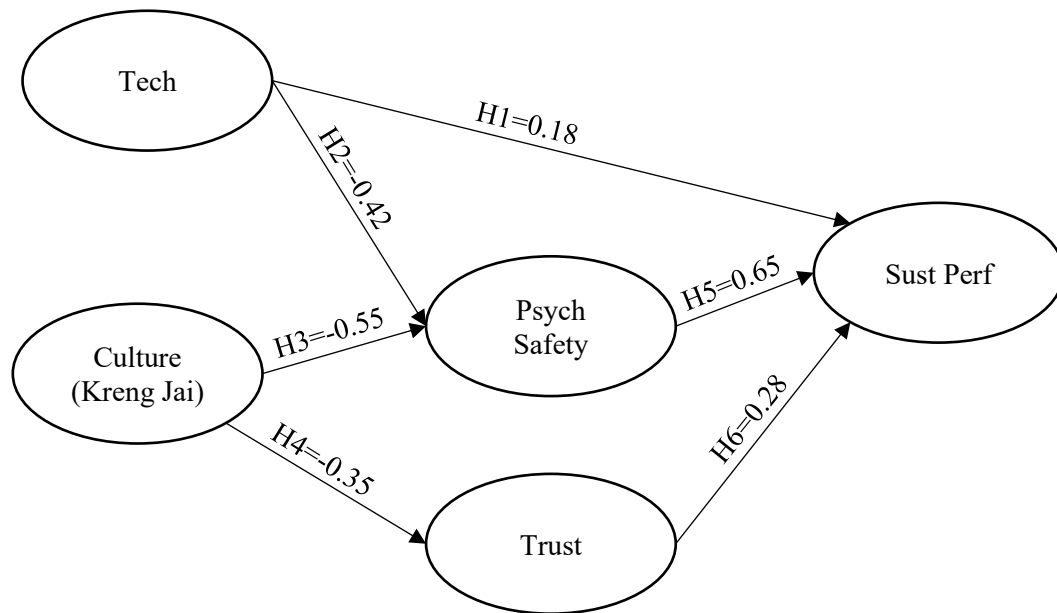
Role of Mitigating Factors: The analysis found that "Psychological Safety" and "Human-Centric HRM" play a crucial role as Mitigating Variables, reducing the negative impacts of culture and technology anxiety. When employees feel safe taking risks, expressing opinions, and being treated with respect, their willingness to accept AI increases, positively affecting overall performance (Gunasekara et al., 2025). Hypothesis testing results and model predictive capability (R) are shown in Tables 6 and 7.

Table 6: Hypothesis Testing Results for Direct Effects and Path Coefficients

Path	β (Original Sample)	t-value	p-value	95% CI (Confidence Interval)	Result
H1 Tech $\rightarrow$ Sust Perf	0.18	2.85	0.004	[0.052, 0.308]	Accepted
H2 Tech $\rightarrow$ Psych Safety	-0.42	8.15	< 0.001	[-0.521, - 0.315]	Accepted
H3 Culture (Kreng Jai) $\rightarrow$ Psych Safety	-0.55	7.82	< 0.001	[-0.680, - 0.410]	Accepted
H4 Culture (Kreng Jai) $\rightarrow$ Trust	-0.35	5.60	< 0.001	[-0.470, - 0.225]	Accepted
H5 Psych Safety $\rightarrow$ Sust Perf	0.65	8.25	< 0.001	[0.505, 0.795]	Accepted
H6 Trust $\rightarrow$ Sust Perf	0.28	5.20	< 0.001	[0.175, 0.385]	Accepted

Table 7: Coefficient of Determination (R^2) of Dependent Variables

Endogenous Constructs	R Square (R^2)	R Square Adjusted	Predictive Power
Psychological Safety	0.525	0.522	Moderate
Organizational Trust	0.410	0.408	Moderate
Sustainable Performance	0.612	0.609	High

**Figure 1: Hypothesis Testing Results for Direct Effects and Path Coefficients**

8. Discussion

1. Overcoming "The Efficiency Trap" to Sustainable Value

Research results indicating that Thai organizations are stuck in "The Efficiency Trap" align with the concepts of many scholars who warn about the dangers of Short-termism. The fact that Digital-Green Synergy has the most decisive influence on sustainability indicates that the solution is not rejecting technology, but a Paradigm Shift from using AI to Reduce (Cost/Headcount) to using it to Create (Value/Sustainability). Implementing AI to manage energy, reduce resource consumption, or create a Green Workplace, alongside caring for people, will create new meaning for work and attract new-generation Talent who value ESG. The strong influence of Digital-Green Synergy ($R^2 = 0.612$) on sustainable performance can be explained by the 'Efficiency Trap' findings. Organizations find it easier to integrate digital tools to improve environmental efficiency (which saves costs) than to improve social equity. Thus, the current path to sustainability in Thai firms is heavily paved with 'Green' logic, while the 'Social' dimension requires the mitigating intervention of Psychological Safety to materialize fully.

2. Managing Thai Cultural Context: From "Kreng Jai" to "Safe."

The discovery that "Kreng Jai" culture is an obstacle to the efficient use of AI is a significant finding in the Thai context. AI requires Accurate Data and intensive Audit, but Kreng Jai causes "Self-

censorship" among employees. However, the research indicates that "Psychological Safety" is the key to solving this problem. Furthermore, through a gender lens, the high proportion of female leaders and practitioners in Thai HR (64.99%) may confer a unique advantage. Worn out by rigid seniority, female and alternative gender employees often advocate more strongly for workplace psychological safety and equity. When leadership explicitly fosters an environment that enables employees to question algorithms, the defensive mechanism of "*Kreng Jai*" transforms into a constructive learning culture, ensuring data integrity and mitigating algorithmic biases (Bankins, 2021).

9. Conclusion and Recommendations

This research concludes that integrating AI into HRM in the Thai context has high potential to drive social sustainability. However, success does not depend solely on technological sophistication, but also on the organization's ability to overcome "The Efficiency Trap" and manage sensitive cultural challenges. Successful organizations are those that can merge the power of "Digital" and "Green" (Digital-Green Synergy) and prioritize creating psychological safety to unlock human potential under Thai culture. To address this, the research proposes a new strategic framework under the principle of "3T Framework" as a compass for Thai organizations:

Trust: Build confidence in AI systems and genuine executive intent that technology is used for Augmentation, not Replacement (Glikson & Woolley, 2020).

Transparency: Disclose algorithm working processes (Explainable AI) and data usage clearly to reduce ambiguity and ethical concerns.

Touch: Maintain human interaction and care (High Touch) in HRM processes despite heavy reliance on technology (High Tech).

10. Recommendations

From the research results, the researcher proposes practical guidelines and policies as follows:

1. Strategic Recommendations for Organizational Executives: Adjust Vision: Change the goal of AI use from "Cost Center" to "Value Creator" by emphasizing success measurements linked to sustainability goals (Sustainability KPIs). Create Safety Culture: Promote an Open Culture that allows employees to question AI and create a Feedback Loop that transcends *Kreng Jai*. Apply the 3T Framework: Apply Trust, Transparency, and Touch in every HR Digital Transformation project.

2. Policy Recommendations for Government: Promote Digital-Green: Support tax incentives or benefits for organizations investing in environmentally and socially friendly technologies. Ethical Standards: Create National AI Ethics Guidelines for HR tasks to guide the business sector and reduce legal risks (Gunasekara et al., 2025).

3. Recommendations for Future Research: In-depth Sector-specific studies should be conducted to see context differences, or Longitudinal Studies of the 3T Framework's impact on employee engagement and financial performance. Additionally, comparative studies with other Asian countries sharing similar cultural contexts may help expand international knowledge.

4. Limitations: It is important to acknowledge that this study focused exclusively on Large Enterprises. Small and Medium-sized Enterprises (SMEs), which may lack complex hierarchical structures, might experience the 'Kreng Jai' culture and AI adoption challenges differently. Future research should investigate these dynamics within the SME context to broaden the applicability of the 3T Framework.

Ethical Declaration: This study involved human subjects via qualitative interviews and quantitative surveys. The research protocols, informed consent documentation, and data protection measures were reviewed and officially approved by the Institutional Review Board (IRB) of Kasetsart University (Approval Certificate No. KUREC- KPS69/012). All participants provided explicit written or digital informed consent before participating in data collection, and all data were handled with absolute anonymity and confidentiality.

Declaration of Generative AI in Scientific Writing: The author(s) declare that no generative AI tools were used in the writing or creation of this manuscript.

Declaration Competing Interests: The authors declare no conflict of interest associated with this publication.

References

- Bankins, S. (2021). The ethical use of artificial intelligence in human resource management: A decision-making framework. *Ethics and Information Technology*, 23(4), 841–854. <https://doi.org/10.1007/s10676-021-09619-6>
- Bouhsaien, L., & Azmani, A. (2024). The potential of artificial intelligence in human resource management. *Applied Computer Science*, 20(3), 153–170. <https://doi.org/10.35784/acs-2024-34>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Budhwar, P., Chowdhury, S., Wood, G., Aguinis, H., Bamber, G. J., Beltran, J. R., & Varma, A. (2023). Human resource management in the age of generative artificial intelligence: Perspectives and research directions on ChatGPT. *Human Resource Management Journal*, 33(3), 606–659. <https://doi.org/10.1111/1748-8583.12524>
- Chaturajinda, C. (2021). AI and Personnel Administration. *Journal of Social Sciences, Faculty of Political Science, Chulalongkorn University*, 51(1), 1–22. <https://so01.tci-thaijo.org/index.php/cusj/article/view/247156>
- Cheng, M. M., & Hackett, R. D. (2021). A critical review of algorithms in HRM: Definition, theory, and practice. *Human Resource Management Review*, 31(1), Article 100698. <https://doi.org/10.1016/j.hrmr.2019.100698>
- Delecraz, S., Eltarr, L., Becuwe, M., Bouxin, H., Boutin, N., & Oullier, O. (2022). Responsible artificial intelligence in human resources technology: An innovative, inclusive, and fair-by-design matching algorithm for job recruitment purposes. *Journal of Responsible Technology*, 11, Article 100041. <https://doi.org/10.1016/j.jrt.2022.100041>

- Figueroa-Armijos, M., Clark, B. B., & da Motta Veiga, S. P. (2023). Ethical perceptions of AI in hiring and organizational trust: The role of performance expectancy and social influence. *Journal of Business Ethics*, 186(1), 179–197. <https://doi.org/10.1007/s10551-022-05166-2>
- Glikson, E., & Woolley, A. W. (2020). Human trust in artificial intelligence: Review of empirical research. *Academy of Management Annals*, 14(2), 627–660. <https://doi.org/10.5465/annals.2018.0057>
- Gunasekara, L., El-Haber, N., Nagpal, S., & De Silva, D. (2025). A systematic review of responsible artificial intelligence principles and practice. *Applied System Innovation*, 8(4), Article 97. <https://doi.org/10.3390/asi8040097>
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2024). Untold facts about PLS-SEM and moving forward. *European Journal of Marketing*, 58(13), 1–18. <https://doi.org/10.1108/EJM-08-2023-0645>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Mahamad, T., & Suttikarn, M. (2020). Artificial Intelligence and Modern Human Resource Management in Organizations. *RMUTT Global Business and Economics Review*, 15(1), 75–89. <https://so03.tci-thaijo.org/index.php/RMUTT-Gber/article/view/243488>
- Newman, D. T., Fast, N. J., & Harmon, D. J. (2020). When eliminating bias isn't fair: Algorithmic reductionism and procedural justice in human resource decisions. *Organizational Behavior and Human Decision Processes*, 160, 149–167. <https://doi.org/10.1016/j.obhdp.2020.03.008>
- Pimthong, S. (2021). The Role of Artificial Intelligence in Human Resource Management. *Journal of Behavioral Science for Development*, 13(1), 1–15. <https://so02.tci-thaijo.org/index.php/JBD/article/view/246473>
- Ruenklin, N. (2025). Ethics in the Responsible Use of Artificial Intelligence in Human Resource Decision Making. *Academic Journal of Political Science and Public Administration*, 7(2), 77–88. <https://so08.tci-thaijo.org/index.php/AJPP/article/view/4529>
- Tanantong, T., & Wongras, P. (2024). A UTAUT-based framework for analyzing users' intention to adopt artificial intelligence in human resource recruitment: A case study of Thailand. *Systems*, 12(1), Article 28. <https://doi.org/10.3390/systems12010028>
- Thanyawatpornkul, R. (2024). Harnessing artificial intelligence for sustainable development in emerging markets: Exploring opportunities and challenges in Thailand. *European Journal of Sustainable Development Research*, 8(4), Article em0273. <https://doi.org/10.29333/ejosdr/15435>